

Structure of M.Tech (Mechatronics and Automation) (w.e.f. 2019-20)

SEMESTER-I

Course Code	Course Name	Hours/week				Maximum Marks		
		Lecture	Tutorial	Practical	Credits	CA	FE	Total
19MTMT106	Advanced Mathematics and Numerical Techniques	3	1	0	4	40	60	100
19MTMX102	Control System Engineering	3	0	0	3	40	60	100
19MTMX103	Sensors & Transducers	3	0	0	3	40	60	100
19MTMD104	Research Methodology	3	0	0	3	40	60	100
19MTMX13_	Elective-I	3	0	0	3	40	60	100
19MTMX13_	Elective – II	3	0	0	3	40	60	100
19MTMX111	Laboratory Practice-I	0	0	6	3	40	60	100
Total		18	1	6	22	280	420	700

SEMESTER-II

Course Code	Course Name	Hours/week				Maximum Marks		
		Lecture	Tutorial	Practical	Credits	CA	FE	Total
19MTMX201	Hydraulic and Pneumatic Systems	3	0	0	3	40	60	100
19MTMX202	Power Electronics	3	0	0	3	40	60	100
19MTMX203	Industrial Instrumentation and Control	3	0	0	3	40	60	100
19MTMX204	Finance and Economics	2	0	0	2	40	60	100
19MTMX23_	Elective-III	3	0	0	3	40	60	100
19MTMX23_	Elective- IV	3	0	0	3	40	60	100
19MTMX211	Laboratory Practice-II	0	0	6	3	40	60**	100
19MTMX221	Technical Seminar-I	0	0	4	2	40	60**	100
Total		17	0	10	22	320	480	800

SEMESTER-III

Course Code	Course Name	Hours/week				Maximum Marks		
		Lecture	Tutorial	Practical	Credits	CA	FE	Total
19MTMX321	Technical Seminar-II	0	0	4	2	40	60**	100
19MTMX322	Project Phase-I	0	0	24	12	40	60**	100
Total		0	0	28	14	80	120	200

SEMESTER-IV

Course Code	Course Name	Hours/week				Maximum Marks		
		Lecture	Tutorial	Practical	Credits	CA	FE	Total
19MTMX421	Project Phase-II	0	0	32	16	100	200	300
Total		0	0	32	16	100	200	300

ELECTIVE-I

Course Code	Subject Name
19MTMX131	Computer Integrated Manufacturing
19MTMX132	Reliability Engineering
19MTMX133	Power Plant Instrumentation
19MTMX134	Smart Material

ELECTIVE-II

Course Code	Subject Name
19MTMX135	Robotics and Automation
19MTMX136	Transducer Design
19MTMX137	Nuclear Instrumentation
19MTMX138	Biomedical Instrumentation

ELECTIVE-III

Course Code	Subject Name
19MTMX231	Flexible Manufacturing System

19MTMX232	Advanced Sensors
19MTMX233	Advanced Environmental Instrumentation
19MTMX234	Advanced Digital Signal Processing

ELECTIVE-IV

Course Code	Subject Name
19MTMX235	Building Automation
19MTMX236	Fault Detection and Diagnosis
19MTMX237	Agricultural and Food Processing Instrumentation
19MTMX238	Autotronics